

## **IN THE CLAIMS**

The following is a listing of the claims in the application with claims 3-8, 22-27 and 46-48, 50-52, and 54-56 shown as currently amended and new dependent claims 57-59 added.

## **LISTING OF CLAIMS**

1. (previously presented )      Method for matching a number N of data reception equipment with a number M of external security modules , each reception equipment being provided with a unique identifier, and each external security module having a unique identifier, method characterised in that it comprises a configuration phase comprising the following steps:

        memorizing all list of identifiers of reception equipment in each data external security module,

        memorizing a list of identifiers of external security modules in each reception equipment,

        and carrying out a check phase when an external security module is connected to a data reception equipment, comprising the following steps:

        verifying whether or not the identifier for said external security module is present in the list of identifiers memorized in said reception equipment, and whether or not the identifier for said reception equipment is present in the list of identifiers memorized in said external security module,

        and if so, authorizing access to data using said external security module and said reception equipment,

        and if not, preventing access to the distributed data by means of said external security module with said reception equipment.

2. (previously presented )      Method set forth in claim 1, characterized in that the

configuration is implemented only when the user connects an external security module to a reception equipment.

3. (currently amended) Method set forth in claim 1, characterized in that the method also comprises a step in which an the operator transmits to the reception equipment to manage the check phase comprising one of the following set values:

- activating the check phase at or after a programmed delay,
- deactivating the check phase at or after a programmed delay,
- specifying an absolute date in which the check phase is activated or deactivated,
- cancelling said programmed date ~~or said programmed delay~~.

4. (currently amended) Method set forth in claim 1, characterized in that an the operator also transmits a signal to the reception equipment (2) containing a message to delete the list of identifiers memorised in the reception equipment (2).

5. (currently amended) Method set forth in claim 1, characterized in that an the operator also transmits to the external security module a signal containing a message to delete the list of identifiers memorized in this external security module.

6. (currently amended) Method set forth in claim 1, characterized in that an the operator transmits the list of M identifiers of the external security modules (6, 8) to a reception equipment (2) through an EMM message specific to said reception equipment (2).

7. (currently amended) Method set forth in claim 1, characterized in that an the operator transmits the list of identifiers of N reception equipment (2) to an external security module (6, 8) through an EMM message specific to said external security module (6, 8).

8. (currently amended) Method set forth in claim 1, characterized in that ~~the~~ an operator transmits the list of M identifiers of external security modules (6, 8) to a group of reception equipment (2) through an EMM message specific to said group of reception equipment (2).

9. (previously presented ) Method set forth in claim 1, characterized in that the operator transmits the list of identifiers of N reception equipment (2) to a group of external security modules (6, 8) through an EMM message specific to said group of external security modules (6, 8).

10. (previously presented ) Method set forth in claim 3 or 4, characterized in that the operator supplies said signal message to a reception equipment (2) through an EMM message specific to said reception equipment (2).

11. (previously presented ) Method set forth in claim 3 or 4, characterized in that the operator supplies said signal message to a group of reception equipment (2) through an EMM message specific to said group of reception equipment (2).

12. (previously presented ) Method set forth in claim 5, characterized in that the operator supplies said signal message to an external security module through an EMM message specific to said external security module (2).

13. (previously presented ) Method set forth in claim 5, characterized in that the operator supplies said signal message to a group of external security modules (6, 8) through an EMM message specific to said group of external security modules (6, 8).

14. (previously presented ) Method set forth in claim 3 or 4, characterized in the operator transmits a signal message for the check phase to a group of reception equipment (2) in a private flow, said private flow being processed by a dedicated software executable in each

reception equipment (2) as a function of the identifier of said reception equipment (2).

15. (previously presented ) Method set forth in claim 1, characterized in that the list of identifiers of external security module (6, 8) is transmitted in a private flow to a group of reception equipment (2) and processed by a dedicated software executable in each reception equipment (2) as a function of the identifier of said reception equipment (2).

16. (previously presented ) Method set forth in claim 1, characterized in that the list of identifiers of reception equipment (2) is transmitted to a group of external security modules (6, 8) in a private flow that is processed by a dedicated software in each of said external security modules (6, 8) or in the reception equipment (2) to which each of said external security modules (6, 8) is connected, as a function of the identifier of said external security module (6, 8).

17. (previously presented ) Method set forth in claim 1, characterized in that digital data are distributed in plain text or in scrambled form.

18. (previously presented ) Method set forth in claim 17, characterized in that digital data are audiovisual programs.

19. (previously presented ) Method set forth in claim 1, characterized in that the list of identifiers of M security modules memorized in a reception equipment (2) is encrypted.

20. (previously presented ) Method set forth in claim 1, characterized in that the list of identifiers of N reception equipment (2) memorised in an external security module (6, 8) is encrypted.

21. (previously presented ) Method set forth in one of claims 6 to 9, 12 and 13, characterized in that the method also includes a mechanism designed to prevent use of an EMM transmitted to the same external security module (6, 8) or to the same reception

equipment (2).

22. (currently amended) Method set forth in claims 6, 7, or 12, characterized in that said EMM is in the following format:

```
EMM-U section()  
table_id = 0x88                8 bits  
section_syntax_indicator = 0   1 bit  
DVB_reserved                   1 bit  
ISO reserved                   2 bits  
EMM-U_section_length           12 bits  
unique_address_field           40 bits  
for (i=0; i<N; i++)  
    EMM_data_byte              8 bits_
```

23. (currently amended) Method set forth in claims 8, 9, or 13, characterized in that said EMM message concerns all external security modules (6, 8) or all reception equipment (2) and is in the following format:

```
EMM-G_section()  
table_id = 0x8A or 0x8B        8 bits  
section_syntax_indicator = 0    1 bit  
DVB reserved                   1 bit  
ISO reserved                   2 bits  
EMM-G_section_length           12 bits  
for (i=0; i<N; i++)  
    EMM_data_byte              8 bits_
```

24. (currently amended) Method set forth in claims 8, 9, or 13, characterized in that said EMM message is specific to a sub-group of external security modules (6, 8) or a sub-group of reception equipment (2) and is in the following format:

```

EMM-S_section()
table_id = 0x8E                8 bits
section_syntax_indicator = 0   1 bit
DVB_reserved                   1 bit
ISO_reserved                   2 bits
EMM-S_section_length           12 bits
shared_address_field           24 bits
reserved                       6 bits
data_format                    1 bit
ADF_scrambling_flag           1 bit
for (i=0; i<N; i++)
    EMM_data_byte              8 bits_

```

25. (currently amended) Method set forth in any one of claims 1-9, 12-13 and 15-20 to 20 characterized in that the reception equipment (2) includes a decoder and the external security module (6, 8) includes an access control card (6) in which information about access rights of a subscriber to digital data distributed by an operator is memorised, and in that matching is done between said decoder and said card (6).

26. (currently amended) Method set forth in any one of claims 1-9, 12-13 and 15-20 to 20, characterized in that the reception equipment (2) includes a decoder and the external security module (6, 8) includes a removable security interface (8) provided with a non-volatile memory and designed to cooperate firstly with the decoder, and secondly with a plurality of

conditional access control cards (6) to manage access to digital data distributed by an operator, and in that, said matching is done between said decoder and said removable security interface (8).

27. (currently amended) Method set forth in any one of claims 1-9, 12-13 and 15-20 to 20 characterized in that the reception equipment (2) includes a decoder provided with a removable security interface (8) with a non-volatile memory and designed to co-operate firstly with said decoder, and secondly with a plurality of conditional access control cards (6) and in that, said matching is done between said removable security interface (8) and said access control cards (6).

28. (previously presented) Reception equipment that can be matched with a plurality of external security modules (6, 8) to manage access to digital data distributed by an operator, characterized in that it includes:

- a non-volatile memory designed to memorise a list of external security modules (6, 8),
- means of verifying if the identifier of an external security module (6, 8) connected to said equipment is present in the list memorised in said non volatile memory.

29. (previously presented) Equipment set forth in claim 28, characterized in that the equipment includes a decoder and in that the external security module (6, 8) is an access control card (6) containing information about access rights of a subscriber to said digital data, matching being done between said decoder and said card (6).

30. (previously presented) Equipment set forth in claim 28, characterized in that the equipment includes a decoder and in that the external security module (6, 8) is a removable security interface (8) provided with a non-volatile memory and designed to cooperate firstly with said decoder, and secondly with a plurality of conditional access control cards (6), to manage

access to said digital data, said matching being done between said decoder and said removable security interface (8).

31. (previously presented) Equipment set forth in claim 28, characterized in that the equipment includes a decoder provided with a removable security interface (8) with a non-volatile memory and designed to cooperate firstly with said decoder, and secondly with a plurality of conditional access control cards (6) and in that matching is done between said removable security interface (8) and said access control cards (6).

32. (previously presented) Decoder that can cooperate with a plurality of external security modules (6, 8) to manage access to audiovisual programs distributed by an operator, each external security module (6, 8) having a single identifier and comprising at least one data processing algorithm, decoder characterized in that it includes:

- a non-volatile memory designed to memorise a list of external security modules (6, 8),
- means of verifying if the identifier of an external security module (6, 8) connected to said decoder is present in the list memorised in said non volatile memory.

33. (previously presented) Decoder set forth in claim 32, characterized in that said external security modules (6, 8) are access control cards (6) in which information about access rights of a subscriber to digital data distributed by an operator is memorised.

34. (previously presented) Decoder set forth in claim 32, characterized in that said external security modules (6, 8) are removable security interfaces (8) including a non volatile memory and designed to cooperate firstly with the decoder, and secondly with a plurality of conditional access control cards (6) to manage access to digital data distributed by an operator.

35. (previously presented) Removable security interface designed to cooperate firstly with a reception equipment (2), and secondly with a plurality of conditional access control cards



(6), to manage access to digital data distributed by an operator, each card having a unique identifier and containing information about access rights of a subscriber to said digital data, interface characterized in that it includes:

- a non-volatile memory designed to memorise a list of subscriber cards,
- means of verifying if the identifier of a card associated with said interface is present in the list memorised in said non-volatile memory.

36. (previously presented) Interface set forth in claim 35 characterized in that it consists of a PCMCIA card containing a digital data descrambling software.

37. (previously presented) Interface set forth in claim 35 characterized in that it consists of a software.

38. (previously presented) Access control system including a plurality of reception equipment (2) each having a unique identifier and that can cooperate with a plurality of external security modules (6, 8) each having a unique identifier, each external security module (6, 8) containing information about access rights of a subscriber to digital data distributed by an operator, said system also including a commercial management platform (1) communicating with said reception equipment (2) and said external security modules (6, 8), characterized in that it also includes:

- a first module arranged in said commercial platform (1) and designed to generate matching queries,
- and a second module arranged in said reception equipment (2) and in said external security modules (6, 8) and designed to process said queries to prepare a matching configuration.

39. (previously presented) Computer program stored in memory executable on N

reception equipment (2) that can cooperate with M security modules (6, 6) each having a unique identifier and in which information about access rights of a subscriber to digital data distributed by an operator are stored, characterized in that it comprises instructions for memorising a list of identifiers of part or all of N reception equipment (2) in each external security module (6, 8), and instructions to memorise a list of identifiers of part or all of the M external security modules (6, 8) in each reception equipment (2), instructions to control the identifier of a security module connected to a reception equipment (2) and the identifier of said reception equipment (2), and instructions to prevent access to said data if the identifier of the security module (6, 8) connected to the reception equipment (2) is not present in the list of identifiers previously memorised in this reception equipment (2) or if the identifier of said reception equipment (2) is not present in the list of identifiers previously memorised in said external security module (6, 8).

40. (previously presented) Method as set forth in claim 21, further characterized in that the operator supplies said signal message to a reception equipment (2) through an EMM message specific to said reception equipment (2).

41. (previously presented) Method as set forth in claim 21, further characterized in that the operator supplies said signal message to a group of reception equipment (2) through an EMM message specific to said group of reception equipment (2).

42. (previously presented) Method as set forth in claim 22, further characterized in that the operator supplies said signal message to a reception equipment (2) through an EMM message specific to said reception equipment (2).

43. (previously presented) Method as set forth in claim 23, further characterized in that the operator supplies said signal message to a group of reception equipment (2) through an EMM message specific to said group of reception equipment (2).

44. (previously presented) Method as set forth in claim 24, further characterized in that the operator supplies said signal message to a group of reception equipment (2) through an EMM message specific to said group of reception equipment (2).

45. (previously presented) Method as set forth in claim 25, further characterized in that the method also includes a mechanism designed to prevent use of an EMM transmitted to the same external security module (6, 8) or to the same reception equipment (2).

46. (currently amended) Method as set forth in claim 25, characterized in that said EMM is in the following format:

```

EMM-U section()
table_id = 0x88                8 bits
section_syntax_indicator = 0   1 bit
DVB_reserved                   1 bit
ISO reserved                   2 bits
EMM-U_section_length           12 bits
unique_address_field           40 bits
for (i=0; i<N; i++)
    EMM_data_byte              8 bits_

```

47. (currently amended) Method as set forth in claim 25, characterized in that said EMM message concerns all external security modules (6, 8) or all reception equipment (2) and is in the following format:

```

EMM-G_section()
table_id = 0x8A or 0x8B        8 bits
section_syntax_indicator = 0    1 bit
DVB reserved                   1 bit

```

ISO reserved	2 bits
EMM-G_section_length	12 bits
for (i=0; i<N; i++)	
EMM_data_byte	8 bits_

48. (currently amended) Method as set forth in claim 25, characterized in that said EMM message is specific to a sub-group of external security modules (6, 8) or a sub-group of reception equipment (2) and is in the following format:

EMM-S_section()	
table_id = 0x8E	8 bits
section_syntax_indicator = 0	1 bit
DVB_reserved	1 bit
ISO_reserved	2 bits
EMM-S_section_length	12 bits
shared_address_field	24 bits
reserved	6 bits
data_format	1 bit
ADF_scrambling_flag	1 bit
for (i=0; i<N; i++)	
EMM_data_byte	8 bits_

49. (previously presented) Method as set forth in claim 26, characterized in that the method also includes a mechanism designed to prevent use of an EMM transmitted to the same external security module (6, 8) or to the same reception equipment (2).

50. (currently amended) Method as set forth in claim 49, characterized in that said

EMM is in the following format:

```

EMM-U section()
table_id = 0x88                8 bits
section_syntax_indicator = 0   1 bit
DVB_reserved                   1 bit
ISO reserved                   2 bits
EMM-U_section_length           12 bits
unique_address_field           40 bits
for (i=0; i<N; i++)
    EMM_data_byte              8 bits_

```

51. (currently amended) Method as set forth in claim 49, characterized in that said EMM message concerns all external security modules (6, 8) or all reception equipment (2) and is in the following format:

```

EMM-G_section()
table_id = 0x8A or 0x8B        8 bits
section_syntax_indicator = 0   1 bit
DVB reserved                   1 bit
ISO reserved                   2 bits
EMM-G_section_length           12 bits
for (i=0; i<N; i++)
    EMM_data_byte              8 bits_

```

52. (currently amended ) Method as set forth in claim 49, characterized in that said EMM message is specific to a sub-group of external security modules (6, 8) or a sub-group of

reception equipment (2) and is in the following format:

```
EMM-S_section()
table_id = 0x8E                8 bits
section_syntax_indicator = 0   1 bit
DVB_reserved                   1 bit
ISO_reserved                   2 bits
EMM-S_section_length           12 bits
shared_address_field           24 bits
reserved                       6 bits
data_format                    1 bit
ADF_scrambling_flag           1 bit
for (i=0; i<N; i++)
    EMM_data_byte              8 bits
```

53. (previously presented ) Method as set forth in claim 27, characterized in that the method also includes a mechanism designed to prevent use of an EMM transmitted to the same external security module (6, 8) or to the same reception equipment (2).

54. (currently amended ) Method as set forth in claim 27, characterized in that said EMM is in the following format:

```
EMM-U section()
table_id = 0x88                8 bits
section_syntax_indicator = 0   1 bit
DVB_reserved                   1 bit
ISO reserved                   2 bits
EMM-U_section_length           12 bits
```

unique_address_field	40 bits
----------------------	---------

for (i=0; i<N; i++)

EMM_data_byte	8 bits
---------------	--------

55. (currently amended ) Method as set forth in claim 27, characterized in that said EMM message concerns all external security modules (6, 8) or all reception equipment (2) and is in the following format:

EMM-G\_section()

table_id = 0x8A or 0x8B	8 bits
-------------------------	--------

section_syntax_indicator = 0	1 bit
------------------------------	-------

DVB reserved	1 bit
--------------	-------

ISO reserved	2 bits
--------------	--------

EMM-G_section_length	12 bits
----------------------	---------

for (i=0; i<N; i++)

EMM_data_byte	8 bits
---------------	--------

56. (currently amended) Method as set forth in claim 27, characterized in that said EMM message is specific to a sub-group of external security modules (6, 8) or a sub-group of reception equipment (2) and is in the following format:

EMM-S\_section()

table_id = 0x8E	8 bits
-----------------	--------

section_syntax_indicator = 0	1 bit
------------------------------	-------

DVB_reserved	1 bit
--------------	-------

ISO_reserved	2 bits
--------------	--------

EMM-S_section_length	12 bits
----------------------	---------

shared_address_field	24 bits
----------------------	---------

reserved	6 bits
data_format	1 bit
ADF_scrambling_flag	1 bit
for (i=0; i<N; i++)	
EMM_data_byte	8 bits

57. (new) Method set forth in claim 10 characterized in that the reception equipment (2) includes a decoder and the external security module (6, 8) includes an access control card (6) in which information about access rights of a subscriber to digital data distributed by an operator is memorized, and in that matching is done between said decoder and said card (6).

58. (new) Method set forth in claim 10 characterized in that the reception equipment (2) includes a decoder and the external security module (6, 8) includes a removable security interface (8) provided with a non-volatile memory and designed to cooperate firstly with the decoder, and secondly with a plurality of conditional access control cards (6) to manage access to digital data distributed by an operator, and in that, said matching is done between said decoder and said removable security interface (8).

59. (new) Method set forth in claim 10 characterized in that the reception equipment (2) includes a decoder provided with a removable security interface (8) with a non-volatile memory and designed to co-operate firstly with said decoder, and secondly with a plurality of conditional access control cards (6) and in that, said matching is done between said removable security interface (8) and said access control cards (6).